ABSTRACT

A computerized machine control (CMC) diagnostic system communicates with a computerized machine controller that utilizes a control program to control the operation of a machine through the use of a plurality of digital channels. In general terms, the system includes a data acquisition component, a data storage component and a viewing component. The data acquisition component queries and acquires time-based transition data about the plurality of digital channels. The data storage component stores the acquired transition data in order to establish an historical pattern of the transition data that can be compared to currently acquired transition data. The historical pattern of transition data is established independently of the control program. Upon comparison of the current transition data to the expected, historical pattern of transition data, a determination about the operational status of the machine being controlled can be made. The operational status can then be displayed on the viewing component.